

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Name of Applicant and Assignee:  
Address of Applicant and Assignee:

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Commissioner for Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

**REVOCATION AND SUBSTITUTION  
OF POWER OF ATTORNEY UNDER 37 C.F.R. §1.36**

Dear Sir:

Pursuant to 37 C.F.R. §1.36, Sun Microsystems, Inc., the applicant and assignee of the patent applications listed on the attached APPENDIX A, revokes all previous powers of attorney in the patent applications listed on the attached APPENDIX A, hereby appoints the following attorneys and/or agents assigned to the Customer Number listed below to prosecute the patent applications listed on the attached APPENDIX A, and to transact all business in the U.S. Patent and Trademark Office connected therewith:

Customer Number 32615

**32615**  
PATENT TRADEMARK OFFICE

Please direct all correspondence and telephone calls concerning the patent applications listed on the attached APPENDIX A to:

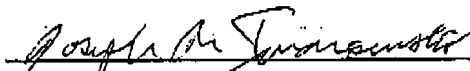
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Further, please change the attorney/docket number corresponding to the patent applications listed in APPENDIX A from the attorney/docket number on file to that indicated on APPENDIX A.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the above-identified applicant.

The undersigned hereby declares that all statements made herein of the undersigned's own knowledge are true, that all statements made on information and belief are believed to be true, and further, that these statements are made with the knowledge that willful false statements, and the like so made, are punishable by fine or imprisonment, or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the sixteen patent applications listed on the attached APPENDIX A or any patents issuing thereon.

Signature:



Dated:

Dec. 20, 2006

Name:

Joseph A. Twarowski

Title:

Assistant General Counsel  
Sun Microsystems, Inc.

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**APPENDIX A**

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**JUL 24 2007**

1. **Patent Application/Serial No.:** 10/799,049  
**Title:** GARBAGE-FIRST GARBAGE  
COLLECTION  
**Filed:** 3/12/2004  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 015079/0946  
**Reference No:** 33226/940001; SUN040074
2. **Patent Application/Serial No.:** 10/394,813  
**Title:** ELISION OF WRITE BARRIERS FOR  
STORES WHOES VALUES ARE IN  
CLOSE PROXIMITY  
**Filed:** 3/21/2003  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 013905/0661  
**Reference No:** 33227/023001; P7479
3. **Patent Application/Serial No.:** 09/551,113  
**Title:** CONCURRENT SHARED OBJECT  
IMPLEMENTED USING A LINKED-  
LIST WITH AMORTIZED NODE  
ALLOCATION  
**Filed:** 4/18/2000  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33226/960000; P4665

4. **Patent Application/Serial No.:** 10/664,799  
**Title:** BLINDED ENCRYPTION AND DECRYPTION  
**Filed:** 9/18/2003  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33227/009001
5. **Patent Application/Serial No.:** 10/313,878  
**Patent No.:** 7,143,124  
**Title:** DETECTION OF DEAD REGIONS DURING INCREMENTAL COLLECTION  
**Filed:** 12/6/2002  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 013559/0709  
**Reference No:** 33226/977001; P8275
6. **Patent Application/Serial No.:** 09/547,288  
**Title:** MAINTAINING A DOUBLE-ENDED QUEUE IN A CONTIGUOUS ARRAY WITH CONCURRENT NON-BLOCKING INSERT AND REMOVE OPERATIONS USING A DOUBLE COMPARE-AND-SWP PRIMITIVE  
**Filed:** 4/11/2000  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 010712/0617  
**Reference No:** 33226/959002; P4663

7. **Patent Application/Serial No.:** 10/861,704  
**Title:** THREAD SUSPENSION SYSTEM AND METHOD  
**Filed:** 6/4/2004  
**Applicant:** Sun Microsystems, Inc.  
**Reference No:** 33226/955002; P2927 C
8. **Patent Application/Serial No.:** 09/454,427  
**Title:** DYNAMIC EMBEDDING OF LITERAL OBJECT DATA IN SUPPLIED INSTANCE OF INFORMATION OBJECT  
**Filed:** 12/3/1999  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 010448/0577  
**Reference No:** 33226/956001; P3916
9. **Patent Application/Serial No.:** 11/099,720  
**Title:** SEQUENTIALLY PERFORMED COMPARE-AND-SWAP  
**Filed:** 4/6/2005  
**Applicant:** Sun Microsystems, Inc.  
**Reel/Frame No.:** 016661/0899  
**Reference No:** 33226/962002; P4667-US-DIV-1

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**10. Patent Application/Serial No.: 09/710,218**

**Patent No.:** 7,117,502

**Title:** LINKED-LIST IMPLEMENTATION OF  
DATA STRUCTURE WITH  
CONCURRENT NON-BLOCKING  
INSERT AND REMOVE OPERATIONS

**Filed:** 11/10/2000

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 011305/0889

**Reference No:** 33226/963001; P4896

**11. Patent Application/Serial No.: 10/996,508**

**Title:** WORK-STEALING QUEUES FOR  
PARALLEL GARBAGE COLLECTION

**Filed:** 11/23/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 011270/0285

**Reference No:** 33226/964002; P4946C1

**12. Patent Application/Serial No.: 60/204,184**

**Title:** PARALLEL GARBAGE COLLECTION  
FOR SHARED MEMORY  
MULTIPROCESSORS

**Filed:** 5/15/2000

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33226/964000; P4948

**13. Patent Application/Serial No.: 09/697,729**

**Patent No.: 6,823,351**

**Title: WORK-STEALING QUEUES FOR  
PARALLEL GARBAGE COLLECTION**

**Filed: 10/26/2000**

**Applicant: Sun Microsystems, Inc.**

**Reel/Frame No.: 011270/0285**

**Reference No: 33226/964001; P4946**

**14. Patent Application/Serial No.: 09/893,256**

**Patent No.: 7,103,887**

**Title: LOAD-BALANCING QUEUES  
EMPLOYING LIFO/FIFO WORK  
STEALING**

**Filed: 6/27/2001**

**Applicant: Sun Microsystems, Inc.**

**Reel/Frame No.: 011943/0085**

**Reference No: 33226/966001; P5388**

**15. Patent Application/Serial No.: 10/166,874**

**Title: PREFETCHING TECHNIQUES FOR  
NETWORK INTERFACES**

**Filed: 6/11/2002**

**Applicant: Sun Microsystems, Inc.**

**Reel/Frame No.: 013001/0641**

**Reference No: 33226/967001; P7322**

**16. Patent Application/Serial No.: 10/679,183**

**Title:** DEFERRING AND COMBINING  
WRITE BARRIERS FOR A GARBAGE-  
COLLECTED HEAP

**Filed:** 10/3/2003

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 014590/0742

**Reference No:** 33226/971001; P7863

**17. Patent Application/Serial No.: 10/653,828**

**Title:** SHARED SYNCHRONIZED SKIP-LIST  
DATA STRUCTURE AND  
TECHNIQUE EMPLOYING  
LINEARIZABLE OPERATIONS

**Filed:** 9/3/2003

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 014483/0341

**Reference No:** 33226/972001; P7982

**18. Patent Application/Serial No.: 10/991,148**

**Title:** USE OF MEMORY PROTECTION TO  
IMPLEMENT REPLICATING  
COLLECTION IN A INCREMENTAL,  
COPYING GARBAGE COLLECTOR

**Filed:** 11/17/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016007/0616

**Reference No:** 33226/974001; P8226



**19. Patent Application/Serial No.: 10/881,101**

**Title:** USING CLASS PROPERTIES TO  
DEGREGATE OBJECTS IN A  
GENERATION MANAGED BY THE  
TRAIN ALGORITHM

**Filed:** 6/30/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 015539/0072

**Reference No:** 33226/975001; P8231

**20. Patent Application/Serial No.: 11/021,287**

**Title:** METHOD AND APPARATUS FOR  
FORWARDING REFERENCES TO  
OBJECTS CONCURRENTLY WITH  
SPACE-INCREMENTAL GARBAGE  
COLLECTION

**Filed:** 12/23/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 015627/0335

**Reference No:** 33226/976001; P8274

**21. Patent Application/Serial No.: 10/313,878**

**Patent No.:** 7,143,124

**Title:** DETECTION OF DEAD REGIONS  
DURING INCREMENTAL  
COLLECTION

**Filed:** 12/6/2002

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 013559/0709

**Reference No:** 33226/977001; P8275

**22. Patent Application/Serial No.: 10/930,483**

**Title:** IMPROVED SCANNING OF  
EVACUATED OBJECTS IN A  
GENERATION MANAGED BY THE  
TRAIN ALGORITHM

**Filed:** 8/31/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 015782/0538

**Reference No:** 33226/978001; P8276

**23. Patent Application/Serial No.: 10/391,405**

**Title:** PARALLEL CACHING OF  
INSERTIONS INTO REMEMBERED  
SETS

**Filed:** 3/18/2003

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 013890/0128

**Reference No:** 33226/979001; P8303

**24. Patent Application/Serial No.: 11/131,827**

**Title:** METHOD AND APPARATUS FOR  
CONCURRENTLY PROCESSING  
REMEMBERED SETS IN A SPACE-  
INCREMENTAL GARBAGE  
COLLECTOR

**Filed:** 5/18/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016366/0209

**Reference No:** 33226/981001; P8317

25. Patent Application/Serial No.: 10/309,503

Patent No.: 7,136,887

Title: METHOD AND MECHANISM FOR  
FINDING REFERENCES IN A CARD  
IN TIME LINEAR IN THE SIZE OF  
THE CARD IN A GARBAGE-  
COLLECTED HEAP

Filed: 12/4/2002

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 013550/0405

Reference No: 33226/982001; P8318

26. Patent Application/Serial No.: 10/799,186

Title: EXPLOITING POPULAR OBJECTS TO  
REDUCE MUTATOR OVERHEAD

Filed: 3/12/2004

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 015091/0736

Reference No: 33226/984001; SUN040081

27. Patent Application/Serial No.: 10/986,527

Title: EXPLOITING POPULAR OBJECTS TO  
REDUCE MUTATOR OVERHEAD

Filed: 11/11/2004

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 015983/0321

Reference No: 33226/984002; SUN040081

28. Patent Application/Serial No.: 10/799,187

Title: CONCURRENT-MARKING-  
INITIATION HEURISTIC

Filed: 3/12/2004

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 015095/0376

Reference No: 33226/983001; SUN040079

29. Patent Application/Serial No.: 10/986,401

Title: CONCURRENT-MARKING-  
INITIATION HEURISTIC

Filed: 11/11/2004

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 016020/0320

Reference No: 33226/983002; SUN040079-CIP

30. Patent Application/Serial No.: 11/090,398

Title: METHOD AND APPARATUS FOR  
SWITCHING BETWEEN PER-THREAD  
AND PER-PROCESSOR RESOURCE  
POOLS IN MULTI-THREADED  
PROGRAMS

Filed: 3/25/2005

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 016300/0319

Reference No: 33226/987001; SUN040951

**31. Patent Application/Serial No.: 11/215,510**

**Title:** METHOD AND APPARATUS FOR  
SELECTIVELY ELIMINATING WRITE  
BARRIERS IN SNAPSHOT-AT-THE-  
BEGINNING CONCURRENT-  
MARKING GARBAGE COLLECTORS

**Filed:** 8/30/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016542/0156

**Reference No:** 33226/989001; SUN041094

**32. Patent Application/Serial No.: 11/128,791**

**Title:** METHOD AND APPARATUS FOR  
REDUCING REMEMBERED SET  
OVERHEAD IN A GENERATIONAL  
GARBAGE COLLECTOR BY  
CONSTRAINING COLLECTION SET  
CHOICE

**Filed:** 5/13/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016336/0241

**Reference No:** 33226/990001; SUN041424

**33. Patent Application/Serial No.: 11/021,260**

**Title:** METHOD AND APPARATUS FOR  
ISOLATING SELECTED HEAP  
OBJECTS USING A FAULTING  
ADDRESS TRAP

**Filed:** 12/23/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 015627/0286

**Reference No:** 33226/991001; SUN041505

**34. Patent Application/Serial No.: 11/091,611**

**Title:** METHOD AND APPARATUS FOR  
IMPROVING PARALLEL MARKING  
GARBAGE COLLECTORS THAT USE  
EXTERNAL BITMAPS

**Filed:** 3/28/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016082/0276

**Reference No:** 33226/992001; SUN050023

**35. Patent Application/Serial No.: 11/091,032**

**Title:** METHOD AND APPARATUS FOR  
RECORDING MODIFIED REFERENCE  
LOCATIONS IN GARBAGE-  
COLLECTED HEAP MEMORY

**Filed:** 3/28/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016082/0191

**Reference No:** 33226/993001; SUN050025

**36. Patent Application/Serial No.: 11/218,145**

**Title:** METHOD AND APPARATUS FOR  
DYNAMICALLY PRE-TENURING  
OBJECTS IN A GENERATIONAL  
GARBAGE COLLECTION SYSTEM

**Filed:** 9/1/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016542/0121

**Reference No:** 33226/994001; SUN050202

**37. Patent Application/Serial No.:** 11/218,179

**Title:** METHOD AND APPARATUS FOR  
BYTE ALLOCATION ACCOUNTING  
IN A SYSTEM HAVING A MULTI-  
THREADED APPLICATION AND A  
GENERATIONAL GARBAGE  
COLLECTOR THAT DYNAMICALLY  
PRE-TENURES OBJECTS

**Filed:** 9/1/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016542/0109

**Reference No:** 33226/995001; SUN050203

**38. Patent Application/Serial No.:** 11/474,599

**Title:** APPARATUS AND METHOD FOR  
COORDINATED VIEWS OF  
CLUSTERED DATA

**Filed:** 6/26/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 017917/0010

**Reference No:** 33226/996001; SUN050482

**39. Patent Application/Serial No.:** 11/477,021

**Title:** METHOD AND APPARATUS FOR  
SEARCHING AND RESOURCE  
DISCOVERY IN A DISTRIBUTED  
ENTERPRISE SYSTEM

**Filed:** 6/28/2006

**Applicant:** Sun Microsystems, Inc.

**Reference No:** 33226/997001; SUN050600

**40. Patent Application/Serial No.:** 11/413,641

**Title:** METHOD AND APPARATUS FOR  
BROWSING SEARCH RESULTS VIA A  
VIRTUAL FILE SYSTEM

**Filed:** 4/28/2006

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 017754/0711

**Reference No:** 33226/998001; SUN050633

**41. Patent Application/Serial No.:** 11/182,539

**Title:** METHOD AND APPARATUS FOR  
GENERATING MEDIA PLAYLISTS BY  
DEFINING PATHS THROUGH MEDIA  
SIMILARITY SPACE

**Filed:** 7/15/2005

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 016366/0563

**Reference No:** 33226/999001; SUN050732

**42. Patent Application/Serial No.:** 10/800,363

**Title:** MIXING COPYING COLLECTION  
AND CONCURRENT MARKING

**Filed:** 3/12/2004

**Applicant:** Sun Microsystems, Inc.

**Reel/Frame No.:** 015983/0314

**Reference No:** 33226/938000; SUN040073



43. Patent Application/Serial No.: 09/837,669

Patent No.: 7,017,160

Title: CONCURRENT SHARED OBJECT  
IMPLEMENTED USING A LINKED-  
LIST WITH AMORTIZED NODE  
ALLOCATION

Filed: 4/18/2001

Applicant: Sun Microsystems, Inc.

Reel/Frame No.: 011734/0644

Reference No: 33226/960001; P4665-CIP-0

44. Patent Application/Serial No.: 11/384,627

Title: CONCURRENCY TECHNIQUE FOR  
SHARED OBJECTS

Filed: 3/20/2006

Applicant: Sun Microsystems, Inc.

Reference No: 33226/960002; P4665US-CON-0